

Amendments to the Claims:

The following is a listing of the claims in the application:

Claim 1 (Currently Amended) A method for performing a two-dimensional (2D) inverse discrete cosine transform (IDCT) on a series of 2D-transform coefficient blocks, wherein the method comprises:

receiving multiple coefficient blocks from the series of 2D-transform coefficient blocks;

grouping together [[a]] respective elements from [[each of]] the multiple coefficient blocks to produce one block of 2D coefficient vectors; and

operating on the block of 2D coefficient vectors with SIMD instructions to carry out the 2D-IDCT on the multiple coefficient blocks.

Claim 2-5 (Original)

Claim 6 (Currently amended) An information carrier medium configured to convey software to a general purpose computer system that supports SIMD instructions, wherein the software comprises a two-dimensional (2D) inverse discrete cosine transform (IDCT) module having:

an input interface configured to receive multiple two-dimensional discrete cosine transform (2D-DCT) coefficient blocks;

a first set of instruction code configured to collect and assemble respective coefficients from the multiple 2D-DCT [[2D-IDCT]] coefficient blocks to form coefficient vectors having one coefficient from each of the 2D-DCT

[[2D-IDCT]] coefficient blocks, wherein the relationship between the coefficients of the coefficient vectors, once established, is maintained unaltered in the transform module;

SIMD instructions configured to operate on the coefficient vectors to carry out a 2D-IDCT of the multiple coefficient blocks in parallel; and
a second set of instruction code configured to extract and arrange inverse-transformed elements of the coefficient vectors to produce multiple inverse-transformed data blocks corresponding to the received multiple 2D-DCT coefficient blocks.

Claim 7-14 (Original)